WEST Search History

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DATE: Tuesday, July 11, 2006

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT; PLUR=YES; OP=ADJ		
☐	L12	L11 with cleaning	1
☐	L11	L10 with liquid	11
☐	L10	L9 with gas	41
☐	L9	l1 with pressure	173
	DB=EPAB; PLUR=YES; OP=ADJ		
☐	L8	DE-2219165-A.did.	0
	DB=USPT; PLUR=YES; OP=ADJ		
☐	L7	US-3958964-A.did.	1
☐	L6	US-3958964-A.did.	1
	DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ		
☐	L5	L3 with pressure	14
☐	L4	L3 with cleaning	0
☐	L3	tray columns	216
	DB=PGPB,USPT; PLUR=YES; OP=ADJ		
☐	L2	L1 with cleaning	4
☐	L1	tray columns	1631

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 10 of 14 returned.

☐ 1. Document ID: JP 2000346547 A

L5: Entry 1 of 14 File: JPAB Dec 15, 2000

PUB-NO: JP02000346547A
DOCUMENT-IDENTIFIER: JP 2000346547 A
TITLE: CRYOGENIC DISTILLATION FOR SEPARATING AIR

PUBN-DATE: December 15, 2000

INVENTOR-INFORMATION:

NAME	COUNTRY
HA, BAO	

INT-CL (IPC): F25 J 3/04

ABSTRACT:

PROBLEM TO BE SOLVED: To economically and efficiently generate a high purity oxygen or argon by operating an argon column at a specific lower pressure than a low-pressure column.

SOLUTION: An argon column 104 is operated at a pressure lower by 0.5 bar than a low-pressure column 103, and its top condenser 27 is cooled by using an expanded nitrogen concentrate flow 81 from a top of the column 103 containing 90 mol% of a nitrogen and 95 mol% of nitrogen. The cooled liquid is added by or substituted for a flow 25A containing a liquid removed from a tray under a top tray of the column 103 or 90 mol% of nitrogen from an intermediate-pressure column 102. Thus, since a high purity oxygen or argon can be economically and efficiently generated, the air can be cryogenically distilled at low cost.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw D

☐ 2. Document ID: EP 491620 A1

L5: Entry 2 of 14 File: EPAB Jun 24, 1992

PUB-NO: EP000491620A1
DOCUMENT-IDENTIFIER: EP 491620 A1
TITLE: Process for the destruction of toxic organic effluents by aqueous phase incineration and installation therefor.

PUBN-DATE: June 24, 1992

INVENTOR-INFORMATION:

NAME	COUNTRY
DULIEU, PIERRE	FR
EUZEN, J PAUL	FR
LEYBROS, JEAN	FR
BOCARD, CHRISTIAN	FR
FAUGERAS, PIERRE	FR

INT-CL (IPC): C02 F 11/08
EUR-CL (EPC): C02F011/08

ABSTRACT:

Process for the destruction of toxic organic effluents by incineration in aqueous phase under pressure of a gas phase containing oxygen, characterised in that the aqueous solution containing the effluents and a neutralising agent, and the gaseous phase containing oxygen are introduced continuously into a pulsed tray column raised to a temperature of between 250 DEG C and 374 DEG C at a pressure of 150 to 250 bars, the byproducts of the incineration being drawn off continuously at the top of the column.

☐ 3. Document ID: EP 2559 A1

L5: Entry 3 of 14 File: EPAB Jun 27, 1979

PUB-NO: EP000002559A1
DOCUMENT-IDENTIFIER: EP 2559 A1
TITLE: Process for the removal of non-converted monomers from a copolymer of acrylonitrile.

PUBN-DATE: June 27, 1979

INVENTOR-INFORMATION:

NAME	COUNTRY
HENSKENS, HUBERTUS JOHANNES GER	

US-CL-CURRENT: 526/341
INT-CL (IPC): C08 F 6/24
EUR-CL (EPC): C08F006/00

ABSTRACT:

CHG DATE=19990617 STATUS=O> A process for the removal of unconverted monomers from copolymers of acrylonitrile and one or more monomer copolymerizable therewith, wherein a suspension of polymer particles is continuously and countercurrently contacted with steam in a gas-liquid contacting device e.g. a sieve-tray column at

a temperature of 95-150 DEG C and a pressure of 75-500 kPa. The process may be applied to suspensions obtained from mass, solution, suspension or emulsion polymerizations producing for example styrene/acrylonitrile and graft acrylonitrile copolymers on a rubber.

☐ 4. Document ID: RU 2167851 C1

L5: Entry 4 of 14 File: DWPI May 27, 2001

DERWENT-ACC-NO: 2001-406583
DERWENT-WEEK: 200143

TITLE: N-methylaniline isolation process

INVENTOR: BATRIN YU, D; BONDARENKO YU, V ; FOKIN, N S ; KACHEGIN, A F ; KUDRYASHOVA, T Z ; SABYLIN, I I ; STAROVOITOV, M K ; YAKUSHKIN, M I

PRIORITY-DATA: 2000RU-0105655 (March 13, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
RU 2167851 C1	May 27, 2001		000	C07C211/46

INT-CL (IPC): C07 C 209/86; C07 C 211/46

ABSTRACTED-PUB-NO: RU 2167851C
BASIC-ABSTRACT:

NOVELTY - Invention relates to isolation of N-methylaniline obtained from vapor-phase N-hydroalkylation of aniline with methanol in presence of hydrogen at atmosphere pressure and elevated temperature. Catalysate, also containing methanol, aniline, water, N,N- dimethylaniline, and others, is subjected to rectification on three columns. Into the first column, catalysate is fed in the form of overheated vapor at 180-250 C in presence of promoter of purification of methanol and water from aniline and N-methylaniline, in particular hydrogen in concentration 1 to 7% in the column feed. First-column top product is a mixture of methanol, water, hydrogen, and small amounts of amines. Mixture is freed from hydrogen, cooled, and fed into the second rectification column, whose top fraction is methanol, which is returned into synthesis, and bottom fraction consists of water, subjected to thermal detoxification, and amines, which are separated and returned into synthesis block. First- column bottom product, containing N-methylaniline and small amounts of aniline and N,N-dimethylaniline (weight proportion from 0.5:1 to 7: 1), is fed into the third column operated under vacuum at top temperature 95-120 C and pressure difference between feeding tray and column top equal to 20 to 80 mm Hg. Desired product is tapped off as side distillate from the lower part of column. When concentration of recycled N,N-dimethylaniline in catalysate goes above 15 wt %, its excess is removed as side distillate from one of the trays disposed between feeding one and desired product takeoff tray.

USE - Industrial organic synthesis.

ADVANTAGE - Simplified process due to lower number of rectification columns and increased yield of commercial product in rectification stage. 2 cl, 11 ex

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☐ 5. Document ID: RU 2167145 C1

L5: Entry 5 of 14 File: DWPI May 20, 2001

DERWENT-ACC-NO: 2001-395763
DERWENT-WEEK: 200142

TITLE: Method of removing industrial nitrobenzene from sulfur-, nitrogen- and oxygen-containing by- products

INVENTOR: BATRIN YU, D; DONTSOV, V N ; FOKIN, N S ; KACHEGIN, A F ; KUDRYASHOVA, T Z ; KUKHARENOK, I S ; SABYLIN, I I ; STAROVOITOV, M K ; STEPANOVA EH, I ; YAKUSHKIN, M I

PRIORITY-DATA: 2000RU-0122747 (September 1, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
RU 2167145 C1	May 20, 2001		000	C07C205/06

INT-CL (IPC): C07 C 201/06; C07 C 205/06

ABSTRACTED-PUB-NO: RU 2167145C
BASIC-ABSTRACT:

NOVELTY - Described is new method of removing industrial nitrobenzene from sulfur-, nitrogen- and oxygen-containing by-products comprising 2-nitro-thiophene, nitrophenols, nitrotoluenes, 1,3-dinitribenzene by distillation under vacuum in rectification column at residual pressure of 20-80 mm Hg at column top, pressure differential of 10 to 160 mm Hg between stillage and column top, temperature difference of 5 to 40 C between stillage 7th theoretical tray from column bottom to isolate purified nitrobenzene at column top, and mixture of nitrobenzene with said impurities at column bottom. Invention makes it possible to prepared industrial nitrobenzene used as stock in production of aniline and other organic products with maximum yield of purified product and minimum energy required for separation purposes.

USE - Chemical industry.

ADVANTAGE - More efficient purification method. 2 cl, 16 ex

☐ 6. Document ID: RU 2137746 C1

L5: Entry 6 of 14 File: DWPI Sep 20, 1999

DERWENT-ACC-NO: 2000-429432

DERWENT-WEEK: 200037

TITLE: Isolation of methanol from 1,4- butinediol synthesis by-product

INVENTOR: OLESHKO, P R; PODOBED, A F ; ZAKHAROV, V I

PRIORITY-DATA: 1998RU-0109926 (May 25, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
RU 2137746 C1	September 20, 1999		000	C07C031/04

INT-CL (IPC): C07 C 29/80; C07 C 31/04

ABSTRACTED-PUB-NO: RU 2137746C
BASIC-ABSTRACT:

NOVELTY - Invention relates to synthesis of 1,4-butinediol from formaldehyde and acetylene.

DETAILED DESCRIPTION - Rectification of by-product containing methanol, water, and traces of formaldehyde and formic acid is proposed to be carried out on 25-30 theoretical tray column at still pressure 400-1300 mm Hg, still-top pressure difference 100-400 mm Hg, and temperature difference between top and 5-8th tray 25-35 C. Separation agent is used, in particular, saturated and unsaturated aliphatic 3-5C -alcohols (e.g. propanol, butanol, amyl alcohol, propargyl alcohol) at weight ratio of separation agent to formaldehyde plus formic acid from 0.2:1 to 4:1. Desired methanol is isolated at the top of column and aqueous methanol with formic acid and separation agent admixture at the bottom.

USE - Industrial organic synthesis and chemical engineering.

ADVANTAGE - Improved purity of 1,4-butinediol and reduced power consumption.

☐ 7. Document ID: DD 301540 A7

L5: Entry 7 of 14 File: DWPI Mar 4, 1993

DERWENT-ACC-NO: 1993-144582
DERWENT-WEEK: 199318

TITLE: Sepn. of methyl:acetate-contg. solvent mixts. by distn. - involves adding methanol-water mixts. from the process to the concentrating column, between column head and inlet

INVENTOR: ANDING, R; GROH, B ; SCHMIDT, W ; STIEBING, E ; WALTER, U

PRIORITY-DATA: 1989DD-0335164 (December 4, 1989)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DD 301540 A7	March 4, 1993		004	C07C067/54

INT-CL (IPC): C07 C 31/04; C07 C 67/54; C07 C 69/14

ABSTRACTED-PUB-NO: DD 301540A
BASIC-ABSTRACT:

Sepg. methyl acetate-contg. solvent mixts. (I) is effected by distn. with addn. of methanol-water mixts. arising from the process itself. The process involves adding mixts. contg. 50-95 wt. % water and 5-50 wt. % MeOH to the concentrating column of the distn. unit, at a point between the top of the column and the inlet, the ratio of 0.2-2.0 w.r.t. the amt. of distillate.

USE/ADVANTAGE - The process enables the sepn. of solvent mixts. contg. a high proportion of MeOAc, with improvements in product quality and capacity, and lower process costs. Thus, adding the above MeOH/water fraction (bottom prod) to the concentrating column enables the reflux ratio to be reduced by about 50 wt. % and the heating and condensation energy to be reduced to about 60%.

In an example, a mixt. of 10% MeOAc, 20% water and 70% methanol was distilled in a bubble tray column, with reflux ratio 5.0, to give a mixt. of 75% MeOAc and 25% MeOH as top product, energy consumption was 2kg low-pressure steam/kg top prod. The same amt. of mixt. with the same overall compsn. was then distilled, starting with two fractions contg. (A) 15% MrOAc and 85% MeOH and (B) 80% water and 20% MeOH, and introducing (B) at a point halfway up the concentrating column. In this case the reflux ratio was 1.0 and the ratio (washing liq):(top prod) was 0.3; the top prod. contained 84.1% MeOAc, 15.1% MeOH and 0.8% water, and the energy consumption was 0.6 kg steam/kg prod.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC

☐ 8. Document ID: DD 300026 A7

L5: Entry 8 of 14 File: DWPI May 21, 1992

DERWENT-ACC-NO: 1992-340955
DERWENT-WEEK: 199242

TITLE: Joint processing of solid-contg. by=product vapours from PET prodn. - by distn. in valve-tray column with specified temp. gradient, injecting polycondensation-stage by=product below the surface of the bottom prod.

INVENTOR: ECKHARDT, H; KLEE, W ; OTTO, B ; SCHMIDT, R ; SCHNEIDER, G

PRIORITY-DATA: 1990DD-0339137 (March 28, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DD 300026 A7	May 21, 1992		003	C08G063/183

INT-CL (IPC): B01 D 5/00; C08 G 63/183; C08 J 11/00

ABSTRACTED-PUB-NO: DD 300026A

BASIC-ABSTRACT:

A process is claimed for jointly processing solid-contg. vapour (A) from the esterification stage and solid-contg. condensed vapour (B) from the polycondensation and/or prepolycondensation stage in the continuous prodn. of PET from terephthalic acid (I) and ethylene glycol (II); the mixt. contains not above 50 wt.% (B) (w.r.t. amt. of A), up to 50 wt.% water and up to 5 wt.% oligomers (w.r.t. B) and its temp. is 100-150 K below the b.pt. of (II) at the relevant column pressure, and the process involves distn. in a valve tray column at atmos. pressure or below and returning the bottom prod. (II contg. dissolved oligomers) to the prodn. process.

The novelty is that (B) is injected below the surface of the bottom prod. in the column, where the pressure at the inlet point is at least 10 kPa above the system pressure in the column, and into the external circulation between column and evaporator, so as to increase the vapour/liq. ratio in the lower and upper parts of the column and simultaneously produce a temp. drop of 55-70 K from the bottom of the column to the tray immediately above the inlet for vapour (A) and a drop of 15-30 K from this tray up to the top of the column, with less than 2 wt.% water at the bottom of the column.

USE/ADVANTAGE - The method provides a low-cost process (w.r.t. appts., energy and materials) for working up the solid-contg. by-prods. from PET prodn., with prodn. of high-grade glycol (II) which is returned to the process

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☐ 9. Document ID: US 4737243 A

L5: Entry 9 of 14 File: DWPI Apr 12, 1988

DERWENT-ACC-NO: 1988-119005
DERWENT-WEEK: 198817

TITLE: Decolouration of poly-alkylene poly-amine cpds. - partic.tri:ethylene-tetr-a:amine, by mixing with acid treated clay or acidic form zeolite, followed by distn.

INVENTOR: DANNHAUS, C S; RAMIREZ, E G ; SIML, R J

PRIORITY-DATA: 1985US-0809109 (December 16, 1985)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 4737243 A	April 12, 1988		004	

INT-CL (IPC): B01 D 3/34; C07 C 85/26

ABSTRACTED-PUB-NO: US 4737243A
BASIC-ABSTRACT:

Polyalkylene polyamine (I) colouration is educed by: (a) reacting discoloured (I) in a reaction chambe in the presence of a catalyst (II) of acid treated clay or acid form zeolite of the H fom fo a specified time at an elevated temp., to fom a slury of (I) and (II); (b) distilling the slurry in a distn. appts.; and (c) dawing

a distilled flow of (I) having reduced colouration fro the distn. appts.

USE/ADVANTAGE - The process is Specifically directed to decolouration of triethylenetetramine (Ia) to produce a puer prod. (in claims). The KOH disposal and neutralisation problems of an earlier semi-batch KOH decolouration treatment process are avoided. Min. (Ia) degradation occurs so that 95% of the (Ia) charge survives the treatment. Pref. the reaction is conducted in a continuous flow in a flooded bed reactor, esp. at 150-225 deg. C, and distn. is effected in a multi-tray column at reduced pressure at the top of the column. When treating (Ia) conditions used include: 3H max. reaction time, 800 psi max. and 100-250 deg. C, (alternatively the reaction time may be 30h max., esp. 6-20h.). Opt. (Ia) is sepd. from (II) before distn.

☐ 10. Document ID: EP 43502 A, DE 3025574 A, US 4339570 A

L5: Entry 10 of 14 File: DWPI Jan 13, 1982

DERWENT-ACC-NO: 1982-04199E
DERWENT-WEEK: 198203

TITLE: Polyester prodn. from precondensates in column reactor - with spontaneous expansion evapn. on entry in cyclone and droplets sepn. from vapour in swirl chamber

INVENTOR: HACHMANN, K; KESPER, B ; MAELLER, E ; MUSCHELKNA, E ; OHSE, H ; SCHIEMANN, W ; VOGELSGESA, R ; WESTERMANN, H

PRIORITY-DATA: 1980DE-3025574 (July 5, 1980)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 43502 A	January 13, 1982	G	028	
DE 3025574 A	February 4, 1982		000	
US 4339570 A	July 13, 1982		000	

INT-CL (IPC): C08 G 63/22

ABSTRACTED-PUB-NO: EP 43502A
BASIC-ABSTRACT:

Prodn. of polyesters comprises introducing precondensates obtd. by ester interchange of dicarbonic acid dialkyl ester with diols or esterification of dicarbonic acids with diols to the first tray of a column reactor, followed by further condensation in the reactor.

The spontaneous expansion evapn. of the precondensate is produced by the pressure drop between the precondensate reaction and the column reactor before it enters the first tray of the column reactor; this pressure drop takes place in a closed chamber, while in a functionally separate zone or annular chamber the liq. components are sepd. from the gases by centrifugal force.

Contamination of reactor walls by droplets of the prod. is prevented.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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Term	Documents
PRESSURE	1762639
PRESSURES	58368
(3 WITH PRESSURE).EPAB,JPAB,DWPI,TDBD.	14
(L3 WITH PRESSURE).EPAB,JPAB,DWPI,TDBD.	14

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☐ 11. Document ID: SU 768411 B

L5: Entry 11 of 14 File: DWPI Oct 7, 1980

DERWENT-ACC-NO: 1981-45551D
DERWENT-WEEK: 198125

TITLE: Automatic control of rectification process - adjusts flows of steam and distillate in accordance with rate of changes of pressure and temp. in column

INVENTOR: BODROV, V I; MATVEIKIN, V G ; VILSKII, E G

PRIORITY-DATA: 1978SU-2611528 (May 3, 1978)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 768411 B	October 7, 1980		000	

INT-CL (IPC): B01D 3/42

ABSTRACTED-PUB-NO: SU 768411B
BASIC-ABSTRACT:

The quality of control of the rectification process, particularly in columns with large time constant, using the method from Parent Cert. No. 500805, is improved and stability of control increased.

The flow of steam is adjusted in accordance with the rate of changes of pressure in the upper part of the column, and the flow of distillate is adjusted to the rate of changes in temp. on the control tray of the column. Bul. 37/7.10.80.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 12. Document ID: DD 122642 A

L5: Entry 12 of 14 File: DWPI Oct 20, 1976

DERWENT-ACC-NO: 1976-92605X
DERWENT-WEEK: 197650

TITLE: Pressure relieving device for separating column trays - fitted without loss of tray active area and used esp. in crude oil, vacuum distn. columns

PRIORITY-DATA: 1975DD-0189119 (October 29, 1975)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DD 122642 A	October 20, 1976		000	

INT-CL (IPC): B01D 3/00

ABSTRACTED-PUB-NO: DD 122642A
BASIC-ABSTRACT:

Pressure equalising device for sepn. column trays, in which the pressure relieving elements cause no redn. in the active area of the tray. The flat surface of the column tray carries a number of openings whose total area is >=15% of the tray area. Over each of these openings lies a horizontal loose valve element whose vertical travel is limited and whose weight determines the pressure at whic it will lift and uncover the opening to relieve the pressure surge. These valve units carry sepn. element in exactly the same way as the remaining tray surface so that no loss of active area results. Used esp. in crude oil vacuum distn. columns. The design permits pressure surges to be dissipated without any risk of the trays being deformed, and permits the active area of the tray to be used in full so that the tray and column capacity is not reduced.

☐ 13. Document ID: DE 2306008 A, FR 2215999 A, US 3958964 A

L5: Entry 13 of 14 File: DWPI Aug 8, 1974

DERWENT-ACC-NO: 1974-58657V
DERWENT-WEEK: 197433

TITLE: Gas liquid contacting column using sintered trays - and gas traps gives improved purification or depletion in absorption or desorption

PRIORITY-DATA: 1973DE-2306008 (February 7, 1973)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 2306008 A	August 8, 1974		000	
FR 2215999 A	October 4, 1974		000	
US 3958964 A	May 25, 1976		000	

INT-CL (IPC): B01D 3/22; B01D 53/18

ABSTRACTED-PUB-NO: DE 2306008A
BASIC-ABSTRACT:

A column for liq.-gas contact, esp. absorption, desorption, comprises trays of open-pore or sintered contacting material, with small passages or ducts through them. Each tray of the column has an overflow pipe, determining the liq. level and extending down to the space below; here its outlet debouches into a gas trap (pref. constituted of a liq. tank or sintered block) above the tray next below; the gas

pressure below the tray sufficiently exceeds that above the tray to maintain a column of liq. permanently inside the pipe, buty not reaching to the top of the pipe.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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☐ 14. Document ID: DE 2219165 A

L5: Entry 14 of 14 File: DWPI

DERWENT-ACC-NO: 1973-69354U
DERWENT-WEEK: 197346

TITLE: Material exchange column attachment - comprising flap valve between trays for rapid pressure reduction

PRIORITY-DATA: 1972DE-2219165 (April 20, 1972)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 2219165 A			000	

INT-CL (IPC): B01D 3/00

ABSTRACTED-PUB-NO: DE 2219165A
BASIC-ABSTRACT:

The downcomer section between trays in the column is equipped with a movable device, which, in normal operation, is tightly closed but in case of a sudden pressure fluctuation, can open by moving into the free space between the trays. Damage to the trays due to a sudden too sharp pressure rise can be prevented as these valves allow a rapid pressure equalisation throughout the column.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Term	Documents
PRESSURE	1762639
PRESSURES	58368
(3 WITH PRESSURE).EPAB,JPAB,DWPI,TDBD.	14
(L3 WITH PRESSURE).EPAB,JPAB,DWPI,TDBD.	14

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Search Results - Record(s) 11 through 11 of 11 returned.

☐ 11. Document ID: US 3612494 A

L11: Entry 11 of 11 File: USPT Oct 12, 1971

US-PAT-NO: 3612494
DOCUMENT-IDENTIFIER: US 3612494 A

TITLE: GAS-LIQUID CONTACT APPARATUS

DATE-ISSUED: October 12, 1971

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Toyama; Akira	Kobe-shi			JA
Nakako; Yukio	Nishinomiya-shi			JA
Kanazawa; Toshio	Kobe-shi			JA

US-CL-CURRENT: 261/102; 261/112.2, 261/97

ABSTRACT:

In a gas-liquid contact apparatus comprising a gas-liquid contact part accommodating metal fin material, a liquid distributor provided on the gas-liquid contact part, a gas distributor provided at an appropriate position on the gas-liquid contact part, a liquid inlet provided in connection with the liquid distributor, a liquid outlet provided at the lowest position of the apparatus, a gas inlet provided in connection with the gas distributor and a gas outlet provided at the highest position of the apparatus, an improvement wherein the fin material consists of one or more corrugated metal fins mounting to each other and at least one gas-liquid redistributor for forming a gas passage on the side of a liquid distribution conduit and in which are provided at the bottom at a position lower than the liquid distributor and higher than the gas distributor.

12 Claims, 19 Drawing figures
Number of Drawing Sheets: 5

Full | Title | Citation | Front | Review | Classification | Date | Reference | [illegible] | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Term	Documents

LIQUID	1305467
LIQ	5310
LIQS	6
LIQUIDS	258034
(10 WITH LIQUID).PGPB,USPT.	11
(L10 WITH LIQUID).PGPB,USPT.	11

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